

**Low VF Schottky Rectifier**

**Reverse Voltage - 60 V**

**Forward Current - 60A**

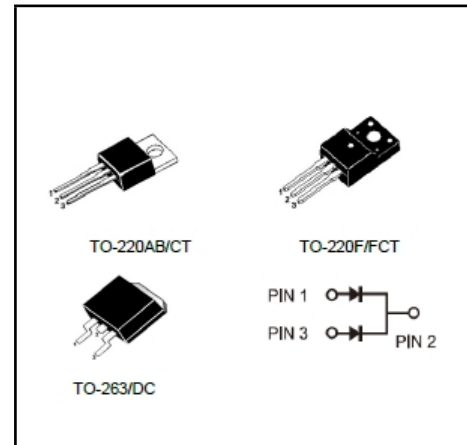


**FEATURES**

- ♦Very low forward voltage
- ♦High current capability
- ♦High forward surge capability
- ♦Low power losses , High efficiency
- ♦Guarding for over voltage protection
- ♦Lead free in comply with EU RoHS 2011/65/EU directives

**MECHANICAL DATA**

- ♦Case: TO-220AB/CT TO-220F/FCT TO-263/DC
- ♦Solder bath temperature 275°C maximum, 10s per JESD22-106



**Primary Characteristic**

|                          |              |
|--------------------------|--------------|
| <b>I<sub>o</sub></b>     | <b>2*30A</b> |
| <b>V<sub>RRM</sub></b>   | <b>60V</b>   |
| <b>I<sub>FSM</sub></b>   | <b>400A</b>  |
| <b>V<sub>F</sub></b>     | <b>0.58V</b> |
| <b>T<sub>J</sub> Max</b> | <b>150°C</b> |

**Maximum Ratings (Per Leg) at Ta=25°C unless otherwise specified**

| Parameter                                                   | Symbols                                 | Value      | Units       |
|-------------------------------------------------------------|-----------------------------------------|------------|-------------|
| Maximum Repetitive Peak Reverse Voltage                     | <b>V<sub>RRM</sub></b>                  | 60         | <b>V</b>    |
| Maximum RMS voltage                                         | <b>V<sub>RMS</sub></b>                  | 60         | <b>V</b>    |
| Maximum DC Blocking Voltage                                 | <b>V<sub>DC</sub></b>                   | 60         | <b>V</b>    |
| Maximum Average Forward Rectified Current                   | Per Leg                                 | 30         | <b>A</b>    |
|                                                             | Total                                   | 60         |             |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave     | <b>I<sub>FSM</sub></b>                  | 400        | <b>A</b>    |
| Operating Temperature Range                                 | <b>T<sub>J</sub></b>                    | -50 ~ +150 | <b>°C</b>   |
| Storage Temperature Range                                   | <b>T<sub>STG</sub></b>                  | -50 ~ +150 | <b>°C</b>   |
| Typical Thermal Resistance (Note1) TO-220AB, TO-263 TO-220F | <b>R<sub>θJA</sub>/ R<sub>θJC</sub></b> | 2/4        | <b>°C/W</b> |

**Note1:** Thermal resistance from Junction to case per leg mounted on heatsink.

**Electrical Characteristics (Per Leg) unless otherwise specified**

| Characteristics                                |          | Symbols        | Value |      | Units |
|------------------------------------------------|----------|----------------|-------|------|-------|
| Forward Voltage Drop(Note2)                    |          | V <sub>F</sub> | Typ   | Max  | V     |
| at I <sub>F</sub> =5A                          | TA=25°C  |                | 0.35  | -    |       |
|                                                | TA=125°C |                | 0.28  | -    |       |
| at I <sub>F</sub> =10A                         | TA=25°C  |                | 0.40  | -    |       |
|                                                | TA=125°C |                | 0.37  | -    |       |
| at I <sub>F</sub> =30A                         | TA=25°C  |                | 0.58  | 0.65 |       |
|                                                | TA=125°C |                | 0.60  | -    |       |
| Maximum Reverse Current at V <sub>R</sub> =60V | TA=25°C  | I <sub>R</sub> | 150   | 200  | uA    |
|                                                | TA=125°C |                | 25    | -    | mA    |

**Note2:** Pulse test: 300 μs pulse width, 1 % duty cycle

**RATINGS AND CHARACTERISTIC CURVES**

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

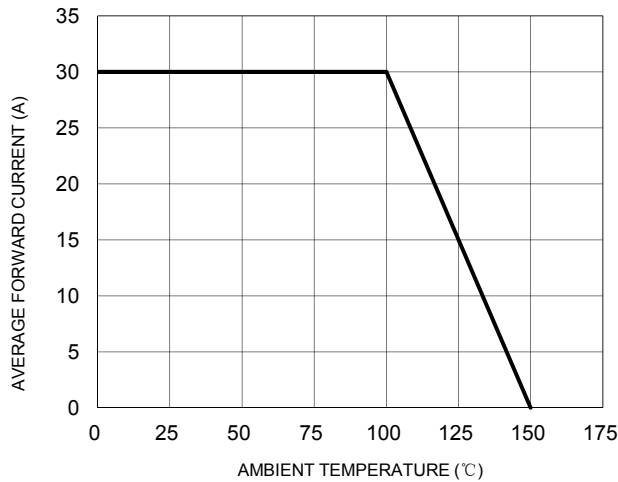


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

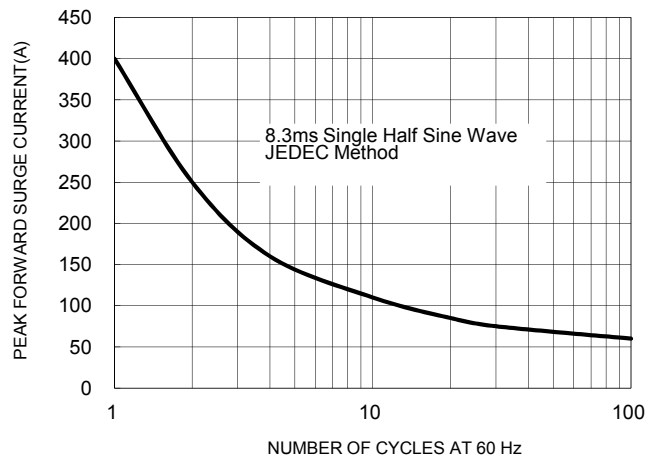


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

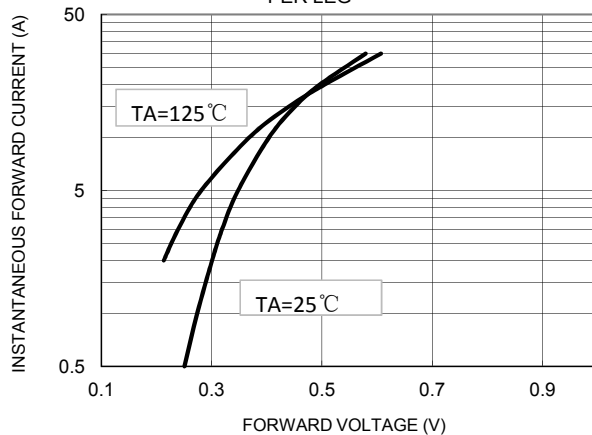
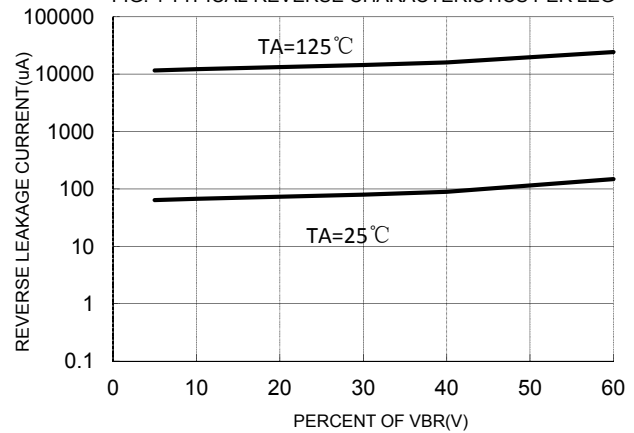
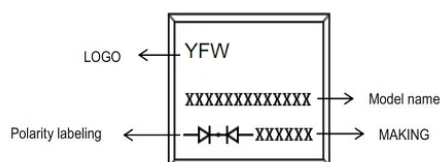


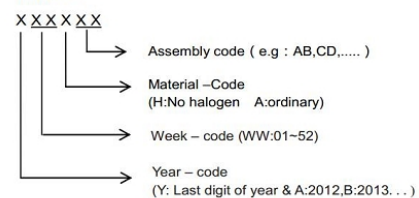
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



**Marking on the body**



**MAKING:**



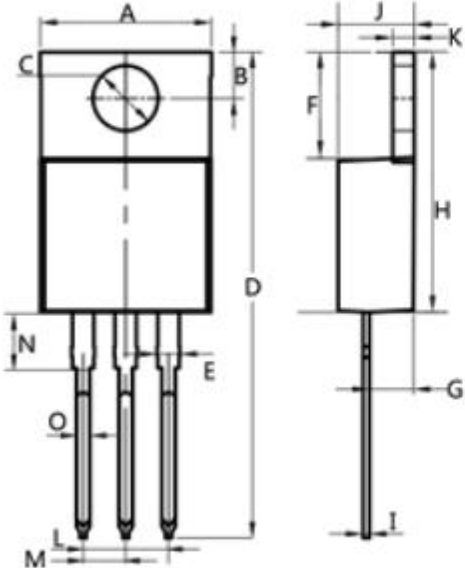
**Ordering information**

| Part Number  | Package  | Unit Weight   | Base Quantity  | Delivery mode              |
|--------------|----------|---------------|----------------|----------------------------|
| SRM60L60CT   | TO-220AB | 0.07oz(1.96g) | 50 pcs / tube  | 1000pcs/box 5000pcs/carton |
| SRM60L60FCT  | TO-220F  | 0.06oz(1.74g) | 50 pcs / tube  | 1000pcs/box 5000pcs/carton |
| SRM60L60DC   | TO-263   | 0.04oz(1.16g) | 50 pcs / tube  | 1000pcs/box 5000pcs/carton |
| SRM60L60DC-R | TO-263   | 0.04oz(1.16g) | 800 pcs / reel | 800pcs/box 4000pcs/carton  |

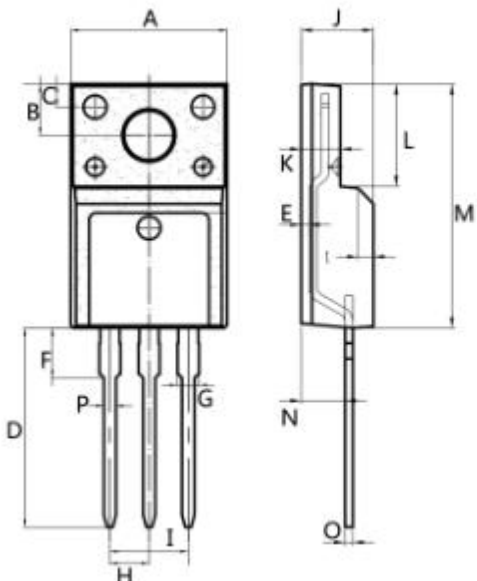
**Note:** For Halogen Free molding compound, add "H" suffix to part number above.

Package Outline Dimensions millimeters

**TO-220AB**

|  | Dim. | Min.     | Max.  |
|-----------------------------------------------------------------------------------|------|----------|-------|
|                                                                                   | A    | 10.15    | 10.35 |
|                                                                                   | B    | 2.65     | 2.95  |
|                                                                                   | C    | 3.70     | 3.90  |
|                                                                                   | D    | 28.5     | 29.5  |
|                                                                                   | E    | 1.30     | 1.45  |
|                                                                                   | F    | 6.35     | 6.55  |
|                                                                                   | G    | 2.9      | 3.3   |
|                                                                                   | H    | 15.0     | 16.0  |
|                                                                                   | I    | 0.38     | 0.42  |
|                                                                                   | J    | 4.45     | 4.55  |
|                                                                                   | K    | 1.25     | 1.35  |
|                                                                                   | L    | Typ 5.08 |       |
|                                                                                   | M    | Typ 2.54 |       |
|                                                                                   | N    | 3.1      | 3.3   |
|                                                                                   | O    | 0.76     | 0.84  |
| All Dimensions in millimeter                                                      |      |          |       |

**TO-220F**

|  | Dim. | Min.     | Max.  |
|-------------------------------------------------------------------------------------|------|----------|-------|
|                                                                                     | A    | 9.95     | 10.25 |
|                                                                                     | B    | 2.95     | 3.25  |
|                                                                                     | C    | 1.25     | 1.45  |
|                                                                                     | D    | 12.95    | 13.25 |
|                                                                                     | E    | 0.50     | 0.65  |
|                                                                                     | F    | 3.1      | 3.3   |
|                                                                                     | G    | 1.30     | 1.45  |
|                                                                                     | H    | Typ 2.54 |       |
|                                                                                     | I    | Typ 5.08 |       |
|                                                                                     | J    | 4.60     | 4.75  |
|                                                                                     | K    | 2.50     | 2.65  |
|                                                                                     | L    | 6.35     | 6.55  |
|                                                                                     | M    | 15.4     | 16.0  |
|                                                                                     | N    | 2.75     | 3.05  |
|                                                                                     | O    | 0.48     | 0.52  |
|                                                                                     | P    | 0.76     | 0.84  |
| All Dimensions in millimeter                                                        |      |          |       |

**TO-263**

